



THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D. C. 20301-1200

HEALTH AFFAIRS

APR 01 2004

The Honorable John McHugh  
Chairman, Subcommittee on Total Force  
House Armed Services Committee  
U.S. House of Representative  
Washington, DC 20515-6035

Dear Mr. Chairman:

I am pleased to forward this report in response to the Senate Armed Services Committee Report 107-62 concerning studying the use of decision support information tools to impact clinical outcomes and the quality of care in the Military Health System (MHS).

Yale University, School of Medicine conducted a study, *Evaluation of Couplers in the Military Health System*, at the request of the Department of Defense (DoD). The study was to evaluate the ability of decision support information tools, specifically clinical couplers, in improving clinical outcomes and the quality of health care in the MHS. The study was reviewed by Institutional Review Boards of the Army, Navy and the Yale University Center for Outcomes Research and Evaluation.

The study incorporated multidimensional measurements to examine the effects of implementing clinical couplers for diagnosis and problem management, on clinical care, resource consumption, and patient and provider satisfaction in two military treatment facilities. It provided a model for measuring and evaluating the impact of complex intervention on quality of care in a multidimensional way across a diverse ambulatory practice. A total of 1,092 patients were enrolled in the study and randomized from April through December 2002.

There were three primary focus areas in the study. The first involved determining the effect of clinical couplers on quality of care, as defined by a set of outpatient quality measures related to patient screening, diagnosis, and management. Quality of care was evaluated using twenty-four health care quality process measures, grouped into screening/prevention and acute/chronic disease categories. The second focused on determining the effect of clinical couplers on resource consumption based on the costs incurred. This was determined by examining established DoD databases to obtain information in four areas: ambulatory visits, pharmacy use, laboratory testing, and diagnostic imaging. The final area studied the effect of clinical couplers on patient and provider satisfaction as assessed through standard questionnaires and provider interviews. Patient satisfaction was assessed by a standardized questionnaire. Provider satisfaction was assessed using a structured, self-administered survey, as well as through individual interviews to solicit their opinions on the major benefits and drawbacks of clinical

couplers. Overall, the usefulness of clinical couplers as a means to improve clinical outcomes and quality of care was inconclusive in the study. However, some providers thought that these clinical decision information tools could enhance activities in education and training areas.

The DoD is committed to the delivery of the highest quality of health care to our Armed Forces and other beneficiary groups. As such, it continues to integrate decision support information tools to not only assist clinicians in providing better health care but also to assist beneficiaries in problem identification and appropriate course of actions. Our work continues in incorporating clinical couplers into the Composite Health Care System II (CHCS II), the Military Electronic Medical Record. This clinical information system generates, maintains, and provides secure online access to a comprehensive and legible health record. CHCS II supports uniform, high-quality health promotion and health care delivery to 8.7 million MHS beneficiaries.

Significant progress has been made toward accomplishing the complex task of integrating couplers into CHCS II. The first integration effort focused on the terminology mapping of the Diabetes clinical coupler and was successfully completed by the 4<sup>th</sup> Quarter of FY 03. To date 400 clinical terms used to document medical history and physical exams have been fully mapped, and the prototype to map 120 clinical terms relating to laboratory, radiology, pharmacy, and allergy management is in progress. Utilizing lessons learned during the Diabetes prototype, work has begun to integrate additional couplers, beginning with the Health Enrollment Assessment Review and Disease Risk Calculator couplers. The first disease risk calculators to be integrated into CHCS II will be the breast cancer and colorectal disease couplers, and then followed by the cardiac disease and diabetes risk assessment couplers.

As we move forward with the worldwide deployment of the Military Electronic Medical Record (CHCS II), the availability of clinical couplers as decision support information tools will continue to support delivery of quality care to our beneficiaries.

Thank you for your continued support of the Military Health System.

Sincerely,



William Winkenwerder, Jr., MD

cc:  
Representative Vic Snyder